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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/806,969	04/06/2001	Graham Ward	87805-9024	9719

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EXAMINER

LE, VU

ART UNIT	PAPER NUMBER
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2613

DATE MAILED: 06/21/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/806,969

Applicant(s)

WARD, GRAHAM

Examiner

Vu Le

Art Unit

2613

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 April 2002 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. ____   |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>3,4,6</u> .   | 6) <input type="checkbox"/> Other: ____                                     |

## **DETAILED ACTION**

### ***Specification***

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.
2. The disclosure is objected to because of the following informalities:  
Page 9, line 9, "decoder" should be "coder". Appropriate correction is required.

### ***Drawings***

3. The drawings are objected to because the following:
  - a. Fig. 1, "16" as described in specification p. 6, line 17 is not shown;
  - b. Fig. 2, "210" and "212" as described in specification p. 7 are not labeled.

Corrected drawing sheets are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of

any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Information Disclosure Statement***

4. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609 A(1) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

The references listed on page 6 of the specification:

EP 0 765 576 and EP 0 913 058 have been considered with respect to their corresponding US patents US 6,285,716 and US 6,674,802 respectively. The EP references are also cited in PTO-892, their copies are not being furnished.

***Claim Objections***

5. Claims 1, 4, 32, are objected to because of the following informalities:

Claim 1, line 5, "packets" first occurrence, it's unclear what these packets referring to;

Claim 4, line 1, "each" should be "said" because "each" has no antecedent basis;

Claim 32, line 12, "from" should be "form".

Appropriate correction is required.

***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

7. Claims 1-34 are rejected under 35 U.S.C. 102(b) as being anticipated by Wells, WO 97/08898.

Re claims 25 and 32, Wells discloses an apparatus/method for forming a multi-program transport stream (figs. 3-4, p. 3, lines 26+, p. 4, lines 8+) having a fixed overall bit rate (p. 9, line 18) and in which the instantaneous allocation of that bit rate amongst the program transport streams is controllable (p. 16, lines 12+), comprising a plurality of program compression units (fig. 2 shows a cascaded system with plural compression units, each being represented in details in fig. 3 or 4. Fig. 3 is primarily referred herein) each having a reference input (i.e., network feed to switch 30); a controller which generates a transport stream reference having sets of reference packets associated respectively with the respective compression units (coder 38 serves this purpose), in which the relative occurrence of packets of the respective sets reflects the desired instantaneous allocation of that bit rate amongst the program transport streams (this is served ~~by switching~~ by switch 30), each compression unit (fig. 3) receiving the transport stream reference (network feed) and being arranged to output packets in alignment with the reference packets associated with that compression unit

Art Unit: 2613

(p. 10, lines 23+, p. 12, line 10+) and a multiplexer which combines the outputs of the respective program compression units to form a multi-program transport stream (p. 19, lines 8+).

Re claims 26 and 33, an apparatus/method according to claims 25/32, wherein the program compression unit (fig. 3) comprises a compression encoder (38) receiving an uncompressed input (output of switch 34 to input of coder 38).

Re claims 27 and 34, an apparatus/method according to Claims 25/32, wherein some or all of the compression units comprise a compression transcoder receiving a compressed input (fig.3, note: coder 38 serves as compression transcoder).

Re claim 28, a method according to Claim 25, wherein the relative occurrences of the different sets of packets in the transport stream input are varied to control the relative bit rates of the respective compression unit outputs. The limitations have been discussed with respect to rate controls for bit allocation in claims 25/32 above. (See also p. 12, lines 24+, p. 16, lines 12+).

Re claim 29, a method according to Claim 28, wherein the activity of each compression unit is monitored to inform said control of relative bit rates (fig. 3 i.e., buffer occupancy).

Re claim 30, *[a method according to Claim 25, wherein the outputs of the respective compression units are combined to form a multi-program transport stream in which the overall bit rate and the instantaneous allocation of that bit rate amongst the program transport streams is defined by said transport stream reference]*, the limitations as claimed have been addressed with respect to claims 25, 28, 32 above.

Re claim 31, a method according to Claim 30, wherein the outputs of the respective compression units are combined by OR'ing (see p. 19, lines 6+, note: remultiplexing as disclosed inherently maybe performed by an "OR'ing" operation).

Re claims 1-2, the scope of claims 1-2 and their limitations are encompassed by claim 25. Thus, the limitations as claimed have been analyzed, considered and rejected with respect to claim 25.

Re claim 3, a method according to Claim 2, wherein the nominated set of transport packets comprises sub-sets of packets, those sub-sets being associated with respective elementary streams of the selected program (p. 18, line 31, "PES").

Re claim 4, a method according to Claim 1, wherein each compression unit is arranged to output packets having at least one parameter determined by the reference packet with which it is in alignment (p. 18, lines 27+).

Re claim 5, a method according to Claim 4, wherein said parameter is a clock reference (p. 18, line 29, "PCR").

Re claim 6, a method according to Claim 4, wherein said parameter is the location of a frame start (p. 8, lines 5+, p. 10, line 30, p. 12, line 22).

Re claim 7, a method according to Claim 4, wherein said parameter is a time stamp (p. 13, lines 3+, p. 18, line 30).

Re claim 8, a method according to Claim 4, wherein said parameter is a delay value (p. 11, lines 18+, p. 12, line 27).

Re claim 9, the scope of claim 9 and its limitations are encompassed by claim 25. Thus, the limitations as claimed have been analyzed, considered and rejected with respect to claim 25.

Re claim 10, the claim has been analyzed and rejected with respect to claim 26 above.

Re claim 11, the claim has been analyzed and rejected with respect to claim 27 above.

Re claim 12, the claim has been analyzed and rejected with respect to claim 4 above.

Re claim 13, the claim has been analyzed and rejected with respect to claim 5 above.

Re claim 14, the claim has been analyzed and rejected with respect to claim 6 above.

Re claim 15, the claim has been analyzed and rejected with respect to claim 7 above.

Re claim 16, the claim has been analyzed and rejected with respect to claim 8 above.

Re claims 17-24, these claims are apparatus claims corresponding to method claims 9-16 respectively. Thus, they have been analyzed and rejected.



### **Contact**

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vu Le whose telephone number is 703-308-6613. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 703-305-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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